

Title (en)

PROCESS FOR TREATING THE LININGS OF HALL-HEROULT ELECTROLYTIC CELLS BY SILICOPYROHYDROLYSIS

Publication

EP 0294300 B1 19911227 (FR)

Application

EP 88420169 A 19880526

Priority

FR 8708012 A 19870601

Abstract (en)

[origin: EP0294300A1] A process for treating worn linings by silicopyrohydrolysis, the linings originating especially from Hall-Héroult electrolysis cells and consisting of a mixture of carbon-containing products and silico- aluminous products impregnated with fluorine-containing inorganic compounds especially of sodium, calcium and aluminium, consisting in converting these linings by treatment at a temperature of at least 1000 DEG C by means of an oxidising gas, water vapour and silica, - firstly in a gas phase containing most of the fluorine, in the form of hydrofluoric acid, and of the carbon, in the form of carbon dioxide and monoxide, - secondly, in an at least partially liquid phase containing the silicon, the aluminium, the calcium and the sodium and most of the other impurities (iron, titanium, heavy metals etc.) in the form of oxygen-containing compounds, essentially in the form of silicates. The process can be used in a single stage or in two stages in two successive reactors.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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EP 0027493 A1 19810429 - VAW VER ALUMINIUM WERKE AG [DE]

Cited by

EP0465388A1; FR2641993A1; EP0550136A1; US5286274A; EP0693005A4; US6066771A; WO9422604A1

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